FIG. 1

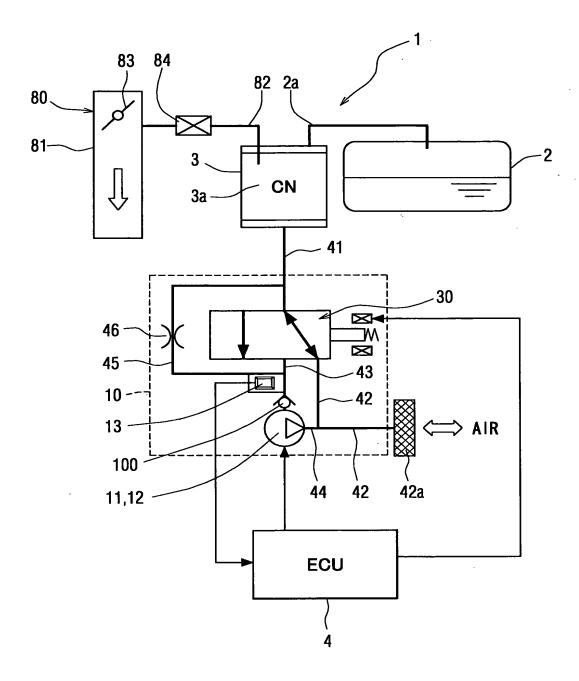


FIG. 2

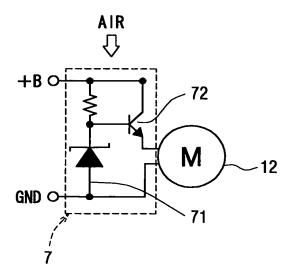


FIG. 3

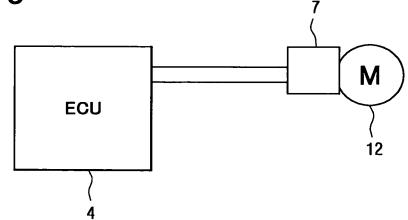
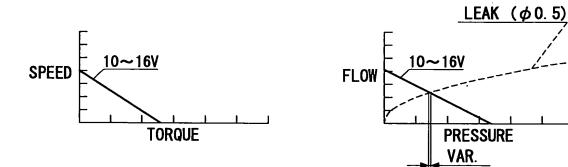


FIG. 4A

FIG. 4B



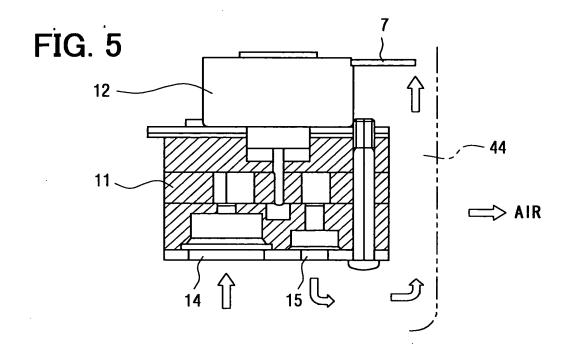


FIG. 6
FIG. 7

TIME

TORQUE

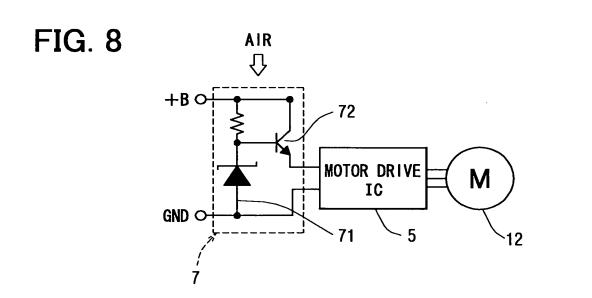


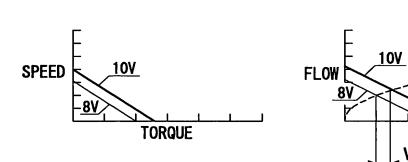
FIG. 9A

FIG. 9B

LEAK $(\phi 0.5)$

PRESSURE

VAR.



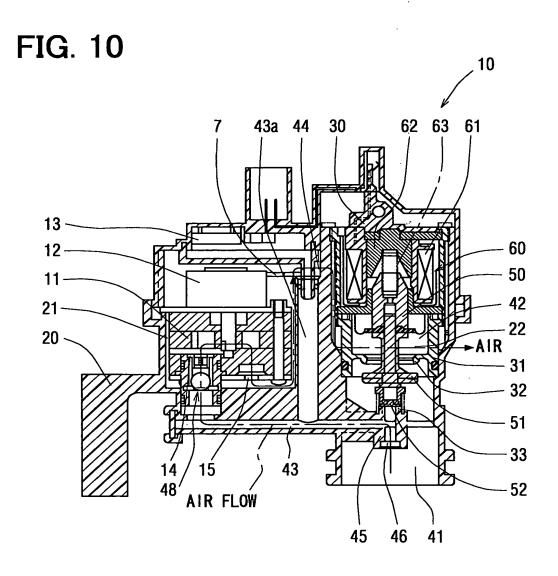


FIG. 11A

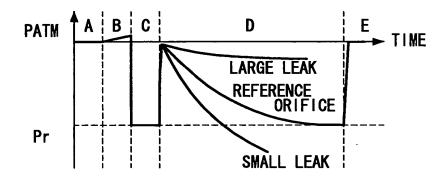


FIG. 11B

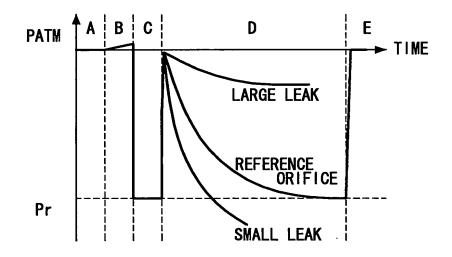


FIG. 13A

FIG. 13B

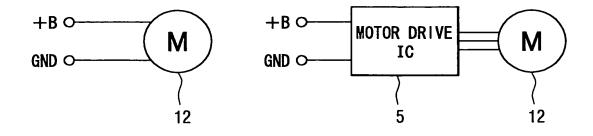


FIG. 12A PRIOR ART

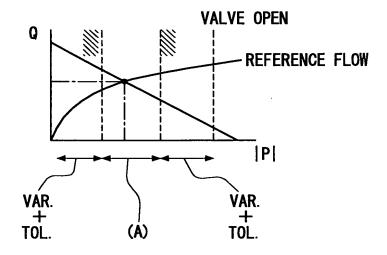


FIG. 12B
PRIOR ART

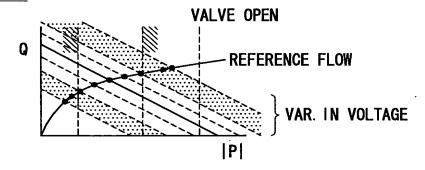


FIG. 12C PRIOR ART

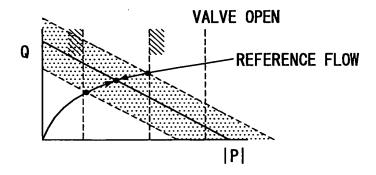
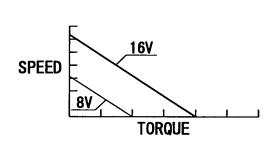


FIG. 14A
PRIOR ART

FIG. 14B PRIOR ART



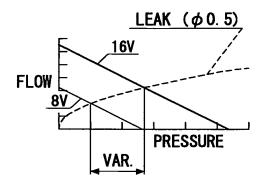


FIG. 15

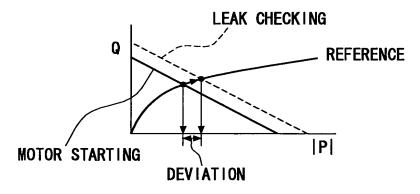


FIG. 16 PRIOR ART

